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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,079	02/11/2002	Eanna Pronsias Timoney	1817-0118P	1540

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EXAMINER

DUNN, DAVID R

ART UNIT	PAPER NUMBER
3616	

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/071,079	TIMONEY ET AL.
Examiner	Art Unit	
David Dunn	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 11 February 2002 .

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-9 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-9 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 11 February 2002 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6)  Other: \_\_\_\_\_

**DETAILED ACTION**

*Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

*Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “lower end of the compression spring … connected to the upper control arm” (claim 3); “the compression spring … assisted by one or more additional springs” (claim 5); and “the compression spring comprises a hydro-pneumatic spring” (claim 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite as there appears to be missing text between the final line of page 6 (“said compression spring having an upper end and a lower end,”) and the first line of page 7 (“articulating joint to the vehicle body,”). Based on the text on pages 2 and 3 which appears to mirror the text of the claims, for the purposes of examination on the merits, it is assumed that the missing text is --said upper end of the compression spring being connected by an--.

Claim 1 is indefinite as the final paragraph of the claim recites “said articulating joint”. This is unclear as the claim previously recited multiple “articulating joints” and it is not clear which joint is meant by “said articulating joint.” The examiner recommends reciting a --first articulating joint--, etc. to differentiate between articulating joints.

Similarly, claim 1 also recites “said control arm” in the final line of the claim. It is unclear which “control arm” is meant as a “lower” and “upper” control arms recited earlier in the claim.

Claim 8 is indefinite as it recites “a control arm”; this is unclear as two control arms are already claimed in claim 1. It is not clear if this refers to one of these control arms or another.

#### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hicks (2,154,569).

Hicks discloses a vehicle suspension system including: an upper control arm (14); a lower control arm (15); a wheel carrier (13); a compression spring (52); wherein the lower articulating joint (50) connecting the spring to the lower control arm is below a line joining centers of rotation of the articulating joints at the inner end (44) and outer end (25) of the control arm (see Figure 1). The compression spring (52) is assisted by one more spring (51); the spring is a coil spring.

7. Claims 1, 2, 5, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Neher (2,871,025).

Neher discloses a vehicle suspension system including: an upper control arm (7); a lower control arm (10); a wheel carrier (2); a compression spring (14); wherein the lower articulating joint (24) connecting the spring to the lower control arm is below a line joining centers of rotation of the articulating joints at the inner end (11) and outer end (43) of the lower control arm (see Figure 1). The compression spring is assisted by an additional spring (17). Neher shows an additional compression spring (26) mounted between the vehicle body and a control arm; wherein the additional spring is a bump stop engagable as the suspension compresses the spring.

8. Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Camuffo (5,005,857).

Camuffo discloses a vehicle suspension system including: an upper control arm (27); a lower control arm (15); a wheel carrier (14); a compression spring (32); wherein the lower

articulating joint (see Figure 2) connecting the spring to the lower control arm is below a line joining centers of rotation of the articulating joints at the inner end (16) and outer end (26) of the control arm (see Figure 2). The compression spring (32) is assisted by one more spring (33); the spring is a coil spring. As seen in Figure 2, the spring is in an upright position in a rest position.

9. Claims 1, 3, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by MacPherson (2,375,670).

See Figure 6; the center of the articulating joint of the spring (45) is lower than a line joining the centers of rotation of the upper control arm (40).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al. (4,170,373) in view of Hicks (2,154,569).

Beck et al. shows a spring mounted to both an upper or lower control arm (see Figures 1 and 2) wherein the spring is mounted a point lower than a line joining the ends of the control arm (see Figure 6).

Beck et al. fails to show the spring mounted with articulating joints.

Hicks is discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Beck et al. with the teachings of Hicks in order to provide a more secure and more flexible joint to the spring.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neher in view of Official Notice.

Neher is discussed above and shows a compression spring being a shock absorber (17) but is silent on the details of the type of shock absorber.

The examiner takes Official Notice that it is old and well known in the art to provide a shock absorber as a hydro-pneumatic spring.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Neher to provide a hydro-pneumatic spring in order to provide an improved suspension.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camuffo in view of Official Notice.

Camuffo is discussed above and shows a compression spring being a shock absorber (33) but is silent on the details of the type of shock absorber.

The examiner takes Official Notice that it is old and well known in the art to provide a shock absorber as a hydro-pneumatic spring.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Camuffo to provide a hydro-pneumatic spring in order to provide an improved suspension.

*Conclusion*

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Varady shows a suspension of interest.
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. The examiner can normally be reached on Mon-Thur, alt. Fridays, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1113.



David Dunn  
Examiner  
Art Unit 3616